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				Initial	Date	
	GEOLOGY AND SOILS	x				
GEO-(E)RB-1	Structures will be designed to resist the maximum credible earthquake associated with nearby faults without endangering human life through collapse. To minimize potential structural damage due to seismically induced ground shaking, the following design measures will be utilized as needed: • Hinge restrainers to hold together superstructure elements during extreme motion • Heavy keys to limit movement between the superstructure and abutment • Increased reinforcement in column sections to assure effective confinement of concrete allowing large movements to occur without collapse	OCTA/Consultant	Project proponent will design structures to resist the maximum credible earthquake associated with nearby faults without endangering human life through collapse. This will be performed in accordance with the Highway Design and the Bridge Manuals.			
GEO-(E)RB-2	Detailed geotechnical studies will be performed for areas that will support pavement or foundations in conjunction with detailed engineering design to provide appropriate boring, soil and fault information. This information will be used to minimize potential adverse impacts. The following items will be addressed: • Precise location of areas of potential liquefaction • Borings to determine the depth and geometry of alluvium and deeper soil types and to sample materials for various laboratory analyses • Establishment of engineering criteria for ground acceleration to be used for the design of corridor structures and facilities in accordance with the Department's guidelines All areas of historically high or perched groundwater levels will be analyzed in detail during project design to verify the potential for liquefaction. Should soils subject to liquefaction be found, site-specific engineering techniques (e.g. importation of stable material, compaction of soils, permanent de-watering and attachment of deep-set piles to bedrock or lower, denser soils) will be implemented.	OCTA/Consultant	Project proponent will conduct detailed geotechnical studies for areas that will support pavement or foundations, in conjunction with detailed engineering design, to provide appropriate boring, soil and fault information. This task will be performed in coordination with the Department.			
GEO-(E)RB -3	Structures will be strengthened to resist predicted ground movements.	OCTA/Consultant	Project proponent will strengthen structures to resist predicted ground movements.			
GEO-(E)RB -4	Appropriate foundation types and depths will be designed (including foundation modifications in the case of existing structures), so that the ground movements will not adversely affect the structure. For example, deep piles or piers that extend below the zone of liquefiable soil may be used.	OCTA/Consultant	Project,proponent will incorporate appropriate foundation types and depths into the design plans.			
GEO-(E)RB -5	Soil will be stabilized to eliminate the potential for liquefaction or to control its effects (e.g., removal and replacement of liquefiable soils; in-situ stabilization by grouting, densification, or dewatering; buttressing of lateral spread zones).	OCTA/Consultant	Project proponent will stabilize soil to minimize potential for liquefaction or to control its effects.			
GEO-(E)RB -6	During final engineering design, the area and thickness of expansive soils will be evaluated. Measures that mitigate for expansive soils will be incorporated into the construction documents. These measures may include replacement of soil, treatment with lime, or supporting of structures on deep foundations.	OCTA/Consultant	Project proponent will incorporate measures to mitigate expansive soils into the construction contract documents. These measures may include replacement of soil, treatment with lime, or supporting of structures on deep foundations.			
GEO-(E)RB -7	Appropriate erosion-control measures will be incorporated into the construction documents and implemented during site preparation, grading and construction. These measures may include protecting exposed slope areas, control of surface flows over exposed soils, use of wetting or sealing agents and/or sedimentation ponds, and limiting soil excavation in high winds.	OCTA/Consultant	Project proponent will review and incorporate appropriate erosion-control measures in the construction documents to be implemented during site preparation, grading and construction. These measures may include protecting exposed slope areas, control of surface flows over exposed soils, use of wetting or sealing agents and/or sedimentation ponds, and limiting soil excavation in high winds.			
GEO-(E)RB -8	Excess excavated soil will be hauled away from the job site and disposed of at an appropriate permitted disposal facility. The contractor will be responsible for ensuring that the soil is hauled away on an approved route to a permitted disposal facility.	OCTA/Consultant	Project proponent will haul excess soil away from the job site and disposed at an appropriate permitted disposal facility.			
GEO-(E)RB -9	To avoid transport of sediments during construction, work within riverbeds will not occur when water is present.	OCTA/Consultant	Project proponent will not have construction activities in riverbeds when water is present. If necessary, cofferdams may be used to keep water out of the construction area.			
GEO-(E)RB - 10	Roadway and bridge deck drainage will outlet under the bridge abutments onto energy dissipaters to prevent slope erosion.	OCTA/Consultant	Roadway and bridge deck drainage will outlet under the bridge abutments onto energy dissipaters to prevent slope erosion.			
	HYDROLOGY, FLOODPLAINS, AND WATER QUALITY	x				
HYD-(E)RB-1	For all bridges and other structures to be built within 100-year floodplains, specific impacts to floodplain elevations will be analyzed at the design stage. Such structures will not be allowed to result in a 0.3-meter (one-foot) or greater impact in floodplain elevation. If analysis of the design indicates impacts equal to or greater than this threshold, the designs will be revised until the impact is reduced to less than the threshold.	OCTA/Consultant	Project proponent will analyze bridges and other structures built within 100-year floodplains at the design stage.			
HYD-(E)RB-2	The Department has obtained a Statewide National Pollutant Discharge Elimination System (NPDES) permit (the Permit). The Department will comply with all provisions of the Permit. As directed by the Permit, the Department implements the Statewide Stormwater Management Plan (SWMP) that describes a framework for management of storm water discharges during the term of the Permit. The Contractor shall implement and maintain temporary (during construction) Best Management Practices (BMPs) and the Department will implement and maintain permanent (post construction) BMPs to control storm water and non-storm water discharges and to meet the discharge requirements of the Santa Ana Regional Water Quality Control Board (RWQCB). The Contractor shall fully conform to the requirements of the Permit, Order No. 99-06-DWQ, NPDES No. CAS000003. When applicable, the contractor shall also conform to the requirements of the General NPDES Permit for Construction Activities, Order No. 92-08-DWQ, NPDES No. CAS000002, and any subsequent revisions. In compliance with the Department's NPDES Permit, a Storm Water Pollution Prevention Plan (SWPPP) will be developed for the SR-22/WOCC proposed project, and submitted for approval prior to construction. The SWPPP would address construction storm water and non-storm water runoff.	OCTA/Consultant	Project proponent will prepare and obtain all necessary permits in accordance with the State Water Resources Control Board and any other agencies. The SWPPP and any other compliance documentation must be submitted to the Department for review and comments.			
HYD-(E)RB-3	The Department's Storm Water Management Plan also encompasses design and operation/maintenance measures to address operation of the Department's facilities. Appropriate permanent Best Management Practices (BMPs), such as dry weather flow diversion, biofiltration strips/swales, infiltration basins, and detention devices, will be selected and approved by the Department during the design process. Routine maintenance will be conducted to ensure the selected BMPs are effective in reducing runoff pollutant levels to insignificant levels.	OCTA/Consultant	Project proponent will include appropriate permanent BMPs in the final design plans to be reviewed and approved by the Department.			
HYD-(E)RB-4	Coordination with the Regional Board and the Department during the design process would be used to select the appropriate permanent BMPs for the proposed improvements.	OCTA/Consultant	Project proponent will coordinate and consult with Caltrans and the Santa Ana Regional Water Quality Control Board to implement the appropriate BMPs for the proposed project.			

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	BIOLOGY	x				
BIO-(E)RB-1	The project will comply with the provisions of Section 1601 of the California Fish and Game Code with respect to project impacts on streambeds and associated habitats. After design of the Preferred Alternative and prior to project construction, a determination of the extent of disturbance to drainages and streambeds in the study area will be made, and a Streambed Alteration Agreement will be obtained.	OCTA/Consultant	The project proponent will coordinate with the CA Department of Fish and Game and comply with the provisions of Section 1601.			
BIO-(E)RB-2	Large existing native trees will be avoided to the maximum extent feasible; where sufficient area is available, replacement trees of ecologically appropriate native species (to be determined by the biologist) will be replanted as near as possible to the tree that was removed.	OCTA/Consultant	Where possible, the project proponent will avoid removal of large native existing trees. If these trees are to be removed, then ecologically appropriate, native species would be planted near the original trees.			
BIO-(E)RB-3	Prior to project construction in Santiago Creek, invasive weeds will be removed from the project area under the supervision of a botanist qualified in the identification of invasive species. Invasive weed removal will be conducted prior to seed set (as determined by monthly spring surveys by a qualified botanist) to minimize the spread of invasive weed seeds in the project area. If it is not possible to remove weeds prior to seed set, measures to minimize the release of invasive weed seeds during weed removal (e.g., manual weed removal while placing weeds in plastic bags) will be used. In addition, early in the spring following termination of construction activities in and adjacent to Santiago Creek and prior to seed set by invasive weed species (as determined by the monthly surveys), removal of invasive weeds will be conducted in and within 60 meters (200 feet) downstream of the construction zone to minimize the contribution of project construction to the spread of invasive weed species in Santiago Creek. If necessary for erosion-control, only weed-free haybales will be used. The removal of invasive species at Santiago Creek must be coordinated with other mitigation projects, including, but not limited to those by the City of Orange.	OCTA/Consultant	The project proponent will conduct the following activities: (1) Invasive weeds will be removed from the project area as described in BIO-(E)RB-3 for areas adjacent and inside of Santiago Creek. (2) No invasive plants will be used in the landscape plans of the proposed project. The California Department of Food and Agriculture (per FHWA interim guidance) will be consulted for a list of invasive species. (3) Additionally, where appropriate, construction equipment will be rinsed to prevent the movement of invasive plants.			
BIO-(E)RB-4	Per Executive Order 13112 Invasive Species (February 1999), (1) Invasive weeds will be removed from the project area as described in BIO-(E)RB-3 for areas outside of Santiago Creek. (2) No noxious weeds will be used in the landscape plans of the proposed project. The California Department of Food and Agriculture (per FHWA interim guidance) will be consulted for a list of invasive species. (3) Additionally, where appropriate, construction equipment will be rinsed to prevent the movement of invasive plants.	OCTA/Consultant	The project proponent will conduct the following activities: (1) Invasive weeds will be removed from the project area as described in BIO-(E)RB-3 for areas outside of Santiago Creek. (2) No invasive plants will be used in the landscape plans of the proposed project. The California Department of Food and Agriculture (per FHWA interim guidance) will be consulted for a list of invasive species. (3) Additionally, where appropriate, construction equipment will be rinsed to prevent the movement of invasive plants.			
BIO-(E)RB-5	In order to prevent impacts to nesting swifts, swallows and other migratory birds as protected under the MBTA, all work on the Santiago Creek bridges and removal of landscaping will be scheduled outside of the dates of 15th of February to 31st of August. During the August 2001 DEIR/EIS, the recommended nesting bird survey was proposed between the 1st of March through the 31st of August. Upon additional analysis and survey conducted, to ensure minimal impacts, the nesting bird survey will be initiated earlier. If this is not feasible, all birds' nests that would be destroyed by the project will be removed prior to February 1 of that year, before the swallow colony returns to the nesting site. Removal of swallow nests will be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed, such as netting or similar mechanism that keeps birds from building nests and that is approved by the biologist. Such exclusion efforts will be continued to keep the structure swallow-free until September or completion of construction.	OCTA/Consultant and Department	The project proponent will conduct a pre-construction survey, to be performed by a biologist, at the Santiago Creek bridge for the presence of migratory birds. If migratory birds are present, appropriate mitigation will be performed as determined by a qualified biologist.			
BIO-(E)RB-6	Measures to minimize harm to bats will include a biologist reviewing the bridge design to determine possible loss of habitat for the bats. At that time, a biologist may determine the need for structural modifications or superficial attachments to avoid the loss of habitat. A pre-construction survey will be performed by a biologist at the Santiago Creek bridge for the presence of bats. If bats are present, appropriate mitigation will be performed as determined by a qualified bat biologist. This may include exclusion, changing staging areas, access routes, and lighting. Each structure and surrounding area that may be affected by the project shall be surveyed by a qualified bat biologist using an appropriate combination of structure inspection, sampling, exit counts, and acoustic surveys. If bats are found, the bat biologist will identify the species and evaluate the colony to: a) Verify that the following potential impacts would not occur: • Verify there would be minimal adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by CDFG or USFWS. • Verify there would be minimal adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service where such effects may be caused by alteration of a colony. • Verify there would be minimal interference with the movement of any native, resident, or migratory bat species, with any corridor used by resident or migratory bat species, or with the ability of any bat species to use nursery sites. • Verify the project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a bat species, cause a bat population to drop below self-sustaining levels, threaten to eliminate a bat community, or reduce the number or restrict the range of a rare or endangered bat. b) Develop appropriate and feasible species-specific mitigation measures to offset impacts. c) Design effective and humane exclusion techniques that reflect seasonal and structural constraints. d) Identify scientific value of the site for research and management. If individuals or colonies are present during project activities and these activities can reasonably be expected to result in harm, then the animals will be excluded during the appropriate time of year. The use of humane methods will minimize the potential to adversely affect populations through increased morbidity and mortality or reduced fecundity. Methods and techniques shall be prepared under the review of the bat biologist using information from above. If there is potential for adverse effects on bat habitat, then cost-effective measures developed under the direction of a bat biologist will be implemented to reduce the effect on the colony and ecosystem to a negligible level. Measures may include: a) Minor structural modifications within engineering parameters for cost, safety, and function b) Minor superficial attachments within engineering parameters for cost, safety, and function c) Measures to improve off-site colony roosts sufficient to offset impacts from colony loss d) Measures to improve species management sufficient to offset impacts from colony loss If exclusion and/or mitigation measures are implemented, then an appropriate monitoring protocol will be implemented in cooperation with the CDFG and USFWS to ensure exclusion and mitigation measures are effective and modified as necessary. Scientific information shall	OCTA/Consultant and Department	The project proponent will conduct a pre-construction survey, to be performed by a biologist, at the Santiago Creek bridge for the presence of bats. If bats are present, appropriate mitigation will be performed as determined by a qualified bat biologist.			

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	also be recovered by identification of associated roosts and habitat use.					
	WETLANDS AND WATERS OF THE UNITED STATES	x				
WET-(E)RB-1	Potential impacts to the wetlands will be mitigated by the implementation of appropriate erosion or runoff controls, to be designed and constructed as part of the widening of the roadway along the west side of the I-405/I-605 Connector segment and by the widening of the SR-22 crossing over Santiago Creek in the SR-22 Mainline segment. These controls will include berms to channel runoff to a collection area(s). A National Pollutant Discharge Elimination System (NPDES) Permit will be obtained for construction activities and implementation of a Storm Water Pollution Prevention Plan (SWPPP) would eliminate or minimize erosion and runoff.	OCTA/Consultant	The project proponent will incorporate BMPs into the design to mitigate potential permanent impacts from runoff to wetlands. Potential construction impacts from runoff will be addressed as part of the SWPPP.			
WET-(E)RB-2	Mitigation proposed for construction activities in the Santiago Creek and Santa Ana River includes the removal of exotic/invasive plant species. A field survey conducted by the Department biologist indicates that Santiago Creek and the Santa Ana River are heavily disturbed areas. Access routes and staging areas for construction activities in Santiago Creek and the Santa Ana River will be limited to designated access routes and staging areas to minimize impacts. These measures will be finalized at the design stage.	OCTA/Consultant	The project proponent will mitigate for construction activities in the Santiago Creek and Santa Ana River by the removal of exotic/invasive plant species. Access route and staging access areas will be consistent with all regulatory agency policies.			
WET-(E)RB-3	Mitigation efforts at Santiago Creek must be coordinated with other mitigation projects, including but not limited to those by the City of Orange (i.e., Santiago Creek Bike Trail).	OCTA/Consultant	The project proponent will coordinate with agencies, including but not limited to the Department and the Cities of Orange and Santa Ana, for mitigation efforts at Santiago Creek and the proposed trail project along Santiago Creek.			
WET-(E)RB-4	Unavoidable permanent and temporary impacts to Waters of the United States will be minimized during the design and construction project phases. The feasibility of back filling locations with native material where piers will be removed will be further investigated during design. Access areas for construction activities will be limited to designated routes to minimize impacts. The Section 401, 404 and 1601 permits required by resource agencies may require additional mitigation measures.	OCTA/Consultant	The project proponent will minimize unavoidable permanent and temporary impacts to Waters of the United States during the design and construction project phases. Project proponent will obtain all necessary permits. Project proponent will consider design of bridge extensions at Santiago Creek so that any new columns may be placed outside of the creek, in order to maintain the creek's soft bottom.			
	The project will comply with the provisions of Section 1601 of the California Fish and Game Code with respect to project impacts on streambeds and associated habitats. After design of the (Enhanced) Reduced Build Alternative and prior to project construction, a determination of the extent of disturbance to drainages/streambeds in the study area will be made and a Streambed Alteration Agreement will be obtained.	OCTA/Consultant	The project proponent will coordinate with the CA Department of Fish and Game and comply with the provisions of Section 1601.			
	CULTURAL RESOURCES	x				
CUL-(E)RB-1	Qualified Native American personnel and a qualified archaeologist will be appointed and authorized to monitor earthmoving activities associated with project construction in the vicinity of previously recorded archaeological resources. Work will be halted in the vicinity of any previously unknown buried cultural materials unearthed during construction, until a qualified archaeologist can assess the significance of the materials. Any further mitigation required would be developed in accordance with the requirements of 36 CFR 800.13, the post review discovery provision of the regulations implementing Section 106 of the National Historic Preservation Act. Any mitigation required by the archaeologist will be implemented including, if necessary, supplemental environmental documentation.	OCTA/Consultant & Department	Project proponent will appoint and authorize a Qualified Native American personnel and a qualified archaeologist to monitor earthmoving activities associated with project construction in the vicinity of two archaeological sites (ORA-392 and ORA-1352) that had previously been identified within the project area. They are located at approximately Fairview Street/SR-22 (ORA-392) and at Seal Beach Boulevard/I-405 (ORA-1352). Maps showing the exact locations of these sites can be provided (upon request) to the qualified archaeologist retained by the project proponent. This task will be accomplished in coordination with the District 12 Archaeologist.			
CUL-(E)RB-2	If human remains and associated artifacts are encountered during ground-disturbing activities, the provisions of PL-101-601, Section 5097.98 and .99 of the Public Resources Code, and Section 7050 of the Health and Safety Code will be followed. Any further mitigation required shall be developed in accordance with the requirements of 36 CFR 800.13, the post review discovery provision of the regulations implementing Section 106 of the National Historic Preservation Act.	OCTA/Consultant	Project proponent will follow the provisions of PL-101-601, Section 5097.98 and .99 of the Public Resources Code, and Section 7050 of the Health and Safety Code, if human remains and associated artifacts are encountered during ground-disturbing activities. This task will be implemented in consultation with the Department's Archaeologist.			
CUL-(E)RB-3	If any structures in the project area are determined to be eligible for listing on the National Register of Historic Places (NHRP) following finalization of the FEIS/EIR, such structures shall not be destroyed or significantly altered as part of construction of the SR-22/WOCC. Proper coordination shall be undertaken with the entity responsible for such listing.	OCTA/Consultant	Project proponent will coordinate with cities in the study area to ensure that any structures listed on the NRHP following finalization of the environmental document are not destroyed or altered. In particular, areas in the City of Orange, including existing stone masonry revetments in the Santiago Creek, may be listed after the FEIS/EIR is complete. Should such listing(s) occur, project proponent will work closely with the city/cities or other sponsor(s) to protect these properties.			
	COMMUNITY IMPACT ASSESSMENT	x				
COM-(E)RB-1	Replacement parking will be provided for Carl Karcher Enterprises in Orange on a nearby off-site location or through construction of a parking garage on the north side of the existing site. The off-site location will be within 0.4 km. of the office complex.	OCTA/Consultant	Project proponent will provide replacement parking for Carl Karcher Enterprises in Orange on a nearby off-site location or through construction of a parking garage on the north side of the existing site. This task will be implemented in coordination with the Carl Karcher Enterprises and the Department.			
COM-(E)RB-2	Replacement parking will be provided for Amerisource-Bergen in Orange either by including this site in a shared parking agreement with The Block at Orange and One City Plaza (see below) or by construction of a parking garage on the site.	OCTA/Consultant	Project proponent will provide replacement parking for Amerisource-Bergen in Orange either by including this site in a shared parking agreement with The Block at Orange and One City Plaza or by construction of a parking garage on the site. This task will be implemented in consultation with the Amerisource-Bergen entity and the Department.			
COM-(E)RB-3	The loss of parking for The Block will be offset by the creation of parking on land formerly used by Metropolitan Drive, across the street from existing parking. This creation of parking and the suggested shared use of parking between The Block and One City Plaza would be sufficient to meet the city's parking requirement.	OCTA/Consultant	Project proponent will include creation of parking for the loss of parking at The Block into its design plans. There will be coordination between the project proponent and representatives from The Block for shared parking between The Block and One City Plaza to meet the city's parking requirement.			
COM-(E)RB-4	During final design, the Department will work with the City of Orange to ensure that the necessary parking for the Theo Lacy Jail expansion is accommodated on land remaining after the construction of Metropolitan Drive. Minor realignment of the SR-57 off-ramp and the I-5/SR-57 to westbound SR-22 connector may be required, as well as reconfiguration of the planned parking. The Department will continue coordination with the City to ensure minimal impacts to Theo Lacy Jail.	OCTA/Consultant	Project proponent will coordinate with the City of Orange and County of Orange to provide sufficient parking is available for the expanded Theo Lacy jail on the residual land remaining after the construction of Metropolitan Drive.			
	TRANSPORTATION AND CIRCULATION	x				
TRA-(E)RB-1	One intersection under the (Enhanced) Reduced Build Alternative would exceed CMP threshold criteria. Additional lanes will be required at	OCTA/Consultant	Project proponent will incorporate ramp intersection modification into the			

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	this intersection. This ramp intersection modification has been incorporated into the (Enhanced) Reduced Build Alternative.		design plans for construction.			
	AIR QUALITY	x				
	N/A					
	NOISE	x				
NOI-(E)RB-1	Based on the *Traffic Noise Impact Technical Reports* (December 2000) and *Traffic Noise Impact Technical Report Addendum* (December 2002), noise barriers are proposed for the (Enhanced) Reduced Build Alternative, a total of 28 noise barriers considered for abatement were found to be feasible. These noise barriers are the highest that are considered feasible. Each of these noise barriers would result in at least a five-dBA noise reduction at the critical receiver. In order to make the proposed noise barriers reasonable, the construction cost of the proposed noise barrier needs to be lower than the total reasonable allowance cost. If the construction cost is higher than the allowance cost, such noise barrier will be considered not reasonable and will not be proposed. The final reasonableness determination will be made during the design phase.	OCTA/Consultant	The Department will determine if noise barriers proposed in the preliminary noise analysis are reasonable. Should they be considered reasonable, then, they are to be incorporated into the preliminary design plans. The project proponent will design and construct noise barriers that are determined to be reasonable in the final design stages. Please note that the reasonableness determined by the Department Design Branch is only based on the preliminary cost estimates.			
NOI-(E)RB-2	At Jordan Intermediate School, predicted interior traffic noise levels at the closest school building to SR-22 would be 61 dBA and would be reduced to 56 dBA with the proposed noise abatement (NB-11). The school buildings are not air-conditioned; therefore, the expected interior noise levels would exceed the NAC of 52 dBA at the closest building. Further study will be conducted to determine if after the construction of NB-11, additional noise abatement is required for the school's classrooms. This abatement could take the form of air-conditioning to those classrooms that would be impacted to allow windows to be closed when those rooms are used. After abatement, noise levels are expected to be below 51 dBA at the closest school building to SR-22.	Department	The Department will conduct further study to determine if after the construction of NB-11, additional noise abatement is required for the school's classrooms. This abatement could take the form of air-conditioning to those classrooms that would be impacted to allow windows to be closed when those rooms are used.			
	At Excelsior Elementary School, predicted interior traffic noise levels at the closest school building to SR-22 would be 58 dBA and would be reduced to 51 dBA with the proposed noise abatement (NB-12). The school buildings are not air-conditioned; therefore, the expected interior noise levels would approach (come within one dBA of) the NAC of 52 dBA at the closest building. Further study will be conducted to determine if, after the construction of NB-12, additional noise abatement is required for the school's classrooms. This abatement could take the form of air-conditioning to those classrooms that would be impacted to allow windows to be closed when those rooms are used. After abatement, noise levels are expected to be below 51 dBA at the closest school building to SR-22.	Department	The Department will conduct further study to determine if, after the construction of NB-12, additional noise abatement is required for the school's classrooms. This abatement could take the form of air-conditioning to those classrooms that would be impacted to allow windows to be closed when those rooms are used.			
NOI-(E)RB-3	The project proponent will comply with the noise ordinances of the County of Orange and the Cities of Los Alamitos, Seal Beach, Westminster, Garden Grove, Santa Ana and Orange. These ordinances regulate the level of noise that may be generated as a result of construction activity. The specific requirements of these noise ordinances, which primarily regulate the hours of the day when construction activity is allowed.	OCTA/Consultant	The project proponent will comply with the noise ordinances of the County of Orange and the Cities of Los Alamitos, Seal Beach, Westminster, Garden Grove, Santa Ana and Orange during construction activities.			
NOI-(E)RB-4	As the site-specific construction plan is developed, existing natural and artificial barriers, such as ground elevation changes and existing buildings, shall be considered for use as shielding against construction noise.	OCTA/Consultant	The project proponent will develop the site-specific construction plan; it will consider existing natural and artificial barriers, such as ground elevation changes and existing buildings, for use as shielding against construction noise.			
NOI-(E)RB-5	Noise barriers and noise barrier additions required for long-term noise abatement/mitigation will be constructed during the initial stages, where feasible, to reduce the impacts of construction noise.	OCTA/Consultant	Noise barriers and noise barrier additions required for long-term noise abatement/mitigation will be constructed during the initial stages by the project proponent, where feasible, to reduce the impacts of construction noise.			
NOI-(E)RB-6	In areas where pile driving and similar activities would occur in close proximity to noise-sensitive land uses, alternate methods of construction will be used where feasible. For pile driving, possible alternate methods include vibration or hydraulic insertion of piles or drilled holes for cast-in-place piles.	OCTA/Consultant	Alternate methods of construction will be used where feasible, in areas where pile driving and similar activities would occur in close proximity to noise-sensitive land uses. For pile driving, possible alternate methods include vibration or hydraulic insertion of piles or drilled holes for cast-in-place piles.			
NOI-(E)RB-7	The project proponent shall comply with the Department' Standard Specifications, "Sound Control Requirements," and all local sound-control and noise level rules, regulations and ordinances that apply.	OCTA/Consultant	Project proponent will review the Department's' Standard Specifications, "Sound Control Requirements" (July 1999 edition), and all local sound-control and noise level rules, regulations and ordinances that apply, and incorporate them as necessary.			
NOI-(E)RB-8	Each internal combustion engine used for any purpose on the construction of the project or related to the project will be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without such a muffler.	OCTA/Consultant	Project proponent will equip each internal combustion engine used for any purpose on the construction of the project or related to the project with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without such a muffler.			
NOI-(E)RB-9	Community meetings will be held to explain to the area residents about the construction work, time involved and the control measures to be taken to reduce the impact of the construction noise.	OCTA/Consultant	Project proponent will conduct community meetings to explain to the area residents about the construction work, time involved and the control measures to be taken to reduce the impact of the construction noise.			
NOI-(E)RB-10	Based on the *Traffic Noise Impact Technical Report Rossmoor Addendum* (September 2002), noise barrier (NB-R1) is proposed for Rossmoor Area. This barrier would fill the gap between two existing state noise barriers and at a height of 4.9 m (16 ft) would provide 5 dBA or more noise reduction. In addition, Noise Barrier NB-C2 is being considered for construction on the elevated northbound I-405/I-605 HOV Connector. The noise barrier would add to the noise reduction provided by NB-R1 and NB-C1 (for College Park West Community). However, adding a noise barrier on the I-405/I-605 Connector (NB-R2) would result in minimal additional noise reduction to the residences that would be benefited by NB-R1. This is because the HOV Connector is further from the residences and would have lower traffic volumes than I-405 and I-605. In order to make the proposed noise barrier NB-C2 reasonable, the construction cost of the proposed noise barrier needs to be lower than the total reasonable allowance cost. If the construction cost is higher than the allowance cost, such noise barrier will be considered not reasonable and will not be proposed. A preliminary reasonableness determination is prepared and presented in Appendix J. Any remaining allowance from constructing NB-R1 and NB-C1 would be used to construct NB-C2 (on HOV connector), however final determination on NB-C2 will be made during final design after considering public input, safety of sight distance, comparability with other connectors, and other design and construction constraints.	OCTA/Consultant	Project proponent will determine if noise barriers proposed in the preliminary noise analysis are reasonable. Should they be considered reasonable, then, they will be incorporated into the preliminary design plans. Please note that the reasonableness determined by the Department Design Branch is only based on the preliminary cost estimates.			
NOI-(E)RB-11	Based on the Traffic Noise Impact Technical Report Garden Grove Addendum (October 2002), noise barriers (NB-G1, NB-G2, and NB-G3) are proposed for the Garden Grove area. These three noise barriers have been determined to be feasible as they provide a minimum of 5 dBA or more noise reduction at the lots of various car dealerships and outdoor eating area of an In-N-Out restaurant, but not at the residential and school sites north of Trask Avenue.	OCTA/Consultant	Project proponent will design and construct noise barriers that are determined to be reasonable in the final design stages. Please note that reasonableness determined by the Department's Design Branch is only based on the preliminary cost estimate. The Department received letters			

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	These noise barriers would provide noise abatement for the commercial uses (car lots) and In-N-Out restaurant. Typically, such noise barriers will not be acceptable by car dealerships or commercial property due to loss of visibility from the freeway. Therefore, public involvement will be a factor in the final decision on barrier construction.		from the commercial property owners that they do not want noise abatement provided at this location.			
NOI-(E)RB-12	At Sunnyside Elementary School, one building has seven classrooms and is not air-conditioned. Future traffic noise levels at this building are predicted to be 64 dBA. The predicted future worst-hour interior traffic noise levels of 54 dBA, with the windows opened, would exceed the Caltrans/FHWA interior NAC of 52 dBA. As noise abatement for this school, air-conditioning would be provided for this school building which includes Classrooms 21, 22, 23, 24, 25, 25 & 27.	OCTA/Consultant	Project proponent will provide abatement, which could take the form of air-conditioning, to those classrooms that would be impacted to allow windows to be closed when those rooms are used.			
	At Mitchell Elementary School, Classroom 4 is located in the closest building to Trask Avenue. This school building is not air-conditioned. The predicted future worst-hour interior traffic noise levels of 62 dBA, with the windows opened, would exceed the Department/FHWA interior NAC of 52 dBA. There is one other classroom in this building and four classrooms in two other buildings, which are not air-conditioned, that would also be impacted. As noise abatement for this school, air-conditioning would be provided for six rooms, Classrooms 3, 4, 6, 7, K-A, and K-B.	OCTA/Consultant	Project proponent will provide abatement, which could take the form of air-conditioning, to those classrooms that would be impacted to allow windows to be closed when those rooms are used.			
	PARKS AND RECREATION	x				
PAR-(E)RB-1	At all crossings of the Santa Ana River trail, grade separations will be provided in order to maintain the trail's continuity.	OCTA/Consultant	Project proponent coordinate with the City of Santa Ana to maintain the trail's continuity during construction activities.			
	The Hoover Street bike trail and Santa Ana River trail shall remain open and fully accessible during construction.	OCTA/Consultant	Project proponent coordinate with the cities of Westminster and Santa Ana to maintain the trails' continuity during construction activities on SR-22.			
	UTILITIES	x				
UTI-(E)RB-1	The project will comply with the standard construction practices and procedures as required by the Department for relocation and protection of existing utilities, including the Department's Policy on High- and Low-Risk Underground Facilities within Highway Rights-of-way.	OCTA/Consultant	Project proponent will comply with the standard construction practices and procedures as required by the Department for relocation and protection of existing utilities, and coordinate with utility companies, as necessary.			
UTI-(E)RB-2	The project will comply with the provisions of PUC General Order No. 131-D, pertaining to the planning and construction of electric generation, transmission/power/distribution line facilities and substations located in California.	OCTA/Consultant	Project proponent will coordinate with utility companies which are bounded by General Order 131-D, and maintain coordination with them to facilitate the preparation of proper documentation.			
UTI-(E)RB-3	Prior to start of construction, a set of signed, final plans will be made available to affected utility surveyors in order to identify underground facilities and provide design alterations.	OCTA/Consultant	Project proponent will make available, prior to start of construction a set of signed, final plans, to affected utility surveyors in order to identify underground facilities and provide design alterations.			
UTI-(E)RB-4	The designers will provide "signed" final plans and subsequent revisions to the Southern California Gas Company. A minimum of 12 weeks is required to analyze the plans and design alterations due to conflicting facilities. Upon request, at least two days prior to the start of construction, the Southern California Gas Company will mark underground facilities at no cost.	OCTA/Consultant	Project proponent will provide "signed" final plans and subsequent revisions to the Southern California Gas Company. Upon request, at least two days prior to the start of construction, the Southern California Gas Company will mark underground facilities at no cost.			
	HAZARDOUS MATERIALS	x				
HAZ-(E)RB-1	Based on the results of the conducted Initial Site Assessment (ISA), there might be a need for the further investigation for the potential contaminant sites. If an ISA has indicated that there is a potential for site contamination, a preliminary Site Investigation (SI) is the first step into an intrusive investigation. If contamination is confirmed, a detailed SI will be conducted to identify the characterization of the type, extent, and general magnitude of contamination.	OCTA/Consultant	The project proponent is responsible for determining if potential properties for acquisition would need to proceed with a detailed Site Investigation (SI) for further study.			
	If at any time in the design and construction phases, prescribed mitigation is not carried out, additional environmental documentation pursuant to NEPA and CEQA must be completed to disclose unmitigated impacts. During construction, the contractor will implement procedures developed during the ISA and supplemental environmental analysis. These may include implementation of a site-specific health and safety plan, site-specific contaminant management plans, removal of storage tanks, and a general construction contingency plan.	OCTA/Consultant	Project proponent is responsible for prescribed mitigation measures to be implemented to avoid the need to conduct additional environmental documentation pursuant to NEPA and CEQA for mitigation measures that have not been met.			
	The SI process includes sampling and analysis of impacted soil or groundwater of the sites with the potential for encountering contamination during project activities. The SI may detect the presence of contamination and provide preliminary estimates of the nature and extent of the contamination through sampling and analysis of soil and water. Because there are properties that are not subject to acquisition but are also potential contamination sources that could affect the project, it is probable that some level of SI work will be required within the project's right-of-way limits to evaluate potential impacts to the project from these off-site sources. In addition, there may be some level of systematic groundwater sampling within areas where groundwater could be encountered during construction. Such sampling may be performed in conjunction with other SI efforts.	OCTA/Consultant	Project proponent will determine if there is a need for a SI, and if this investigation is properly conducted. This is including, but not limited to, soil sampling and systematic groundwater sampling.			
	If necessary, the SI will indicate if there is a need for the remedial and clean-up action (preparation of options for remedial action at a site where contamination was detected during the SI).	OCTA/Consultant	Project proponent is responsible for conducting a remedial action, should the results of the SI determine it to be necessary.			
HAZ-(E)RB-2	A health and safety plan will be developed to guide all construction activities. A certified industrial hygienist will prepare the plan based on evaluations of the proposed construction activities and the potential hazards identified in the ISA. The plan will contain specific procedures for encountering both expected and unexpected contaminants. The plan will prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements for the protection of construction workers and third parties. The health and safety plan will meet the requirements of 29 CFR 1910 and all other applicable federal, state and local regulations and requirements.	OCTA/Consultant	Project proponent will develop a health and safety plan by a certified industrial hygienist based on the evaluations of the proposed construction activities and the potential hazards identified in the ISA. This plan should be forwarded to the Department for review and comments.			
HAZ-(E)RB-3	A soils and groundwater contaminant management plan will be implemented during construction if the ISA finds or suspects contamination. The plan will include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of materials in accordance with applicable federal, state and local regulations and requirements.	OCTA/Consultant	Project proponent will prepare a soils and groundwater contaminant management plan if the ISA finds or suspects contamination. This plan should be forwarded to the Department for review and comments.			
HAZ-(E)RB-4	All procedures for removal of above-ground and underground storage tanks, if necessary, must be in accordance with all applicable federal, state and local regulations.	OCTA/Consultant	Project proponent will remove, if found, above-ground and underground storage tanks may be required.			
HAZ-(E)RB-5	Before construction begins, a contingency plan will be in place to address such events as discovery of unidentified underground storage tanks, hazardous material, petroleum hydrocarbons, or hazardous or solid wastes during construction. This contingency plan will address underground storage tank decommissioning, field screening and material testing methods, mitigation, and contaminant management requirements, and health and safety requirements for construction workers. If an unexpected release of hazardous substances is found in reportable quantities, the National Response Center must be notified and clean up coordinated with environmental agencies.	OCTA/Consultant	Project proponent will provide a contingency plan in place prior to construction activities, to address such events as discovery of unidentified underground storage tanks, hazardous material, petroleum hydrocarbons, or hazardous or solid wastes during construction.			

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HAZ-(E)RB-6	All structures that would be demolished as part of construction will undergo an evaluation for the presence of asbestos-containing materials prior to demolition. The exact number and location of acquisitions will be identified during final design. Sample collection procedures will be based upon the Asbestos Hazard Emergency Response Act (AHERA) protocols and Environmental Protection Agency (EPA) guidelines.	OCTA/Consultant	Project proponent will evaluate the presence of asbestos-containing materials on all structures to be demolished as part of the construction activity, prior to demolition.			
	Surveys will be conducted following modified AHERA, Occupational Safety and Health Administration (OSHA) Asbestos Construction Standard, 29 CFR 926.1101, and applicable regulations under the federal National Emission Standard for Hazardous Air Pollutants (NESHAP). State and local regulations will be incorporated where applicable. An EPA/AHERA-certified building inspector will collect samples.	OCTA/Consultant	Project proponent will conduct surveys that will adhere to all applicable Federal and State laws. Standard procedures for surveys include:· Initial facility walk-through· Review of facility drawings for accuracy· Identification of suspect asbestos-containing materials· Collection of suspect material samples and placement into separate, sealed sample bags· Assignment of a unique sample number· Record data on sample bag and information on sample onto field notes · Record sample locations on plan drawings· Decontamination of sampling tools after collection of each sample· Delivery of samples to an accredited laboratory for analysis, accompanied by a completed chain of custody form. Laboratories accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) will analyze samples.			
	The samples will be analyzed using the following methods:· EPA Interim Method for the Detection of Asbestos in Bulk Insulation Samples EPA 600/M4-82020 (December 1982) · McCrone Research Institute's The Asbestos Particle Atlas. The samples will be analyzed using Polarized Light Microscopy (PLM) visual area estimation (VAE). Materials containing less than ten percent asbestos by PLM-VAE may be reanalyzed by PLM point counting. Additional treatment and tests may be used as required to accurately define the composition (i.e., washing, extractions, and transmission electron microscopy). Classifications and determination of asbestos-containing material (ACM) is to be based upon all current regulatory information including NESHAP clarifications and multi-layered systems as published in the Federal Register.	OCTA/Consultant	Project proponent will conduct samples that will adhere to all applicable Federal and State laws.			
HAZ-(E)RB-7	All structures that would be demolished as part of construction will also undergo an evaluation for the presence of lead-based paint (LBP) prior to demolition. The Resource Conservation Recovery Act (RCRA), 40 CFR 261, requires the generator of construction demolition waste to characterize the wastes to determine if they are "hazardous wastes" with special disposal requirements.	OCTA/Consultant	Project proponent will adhere to the requirements of RCRA, 40 CFR 261, to determine proper disposal of lead-based paint, should LBP be discovered.			
HAZ-(E)RB-8	The soil in unpaved areas next to the traffic lanes or shoulders might be contaminated with the lead from vehicle emissions. The design consultant will conduct the lead investigation during the early stage of design. If lead contamination is found, the results/conclusions will be included in the PS&E package and the Resident Engineer's file by the design consultant. The design consultant will prepare the ADL SSP to address the handling of the impacted soil in accordance with the Department's policies and guidelines as well as the Variance issued by the Department of Toxic and Substances Control (DTSC). Also, a written notification should be provided to the Regional Water Quality Control Board (RWQCB).	OCTA/Consultant	Project proponent will conduct the ADL investigation during the early design phase and handling of the impacted soil to be addressed in accordance with all the applicable Federal and State laws.			
HAZ-(E)RB-9	Areas prone to radon gas will be tested prior to demolition or construction operations for the project. The EPA recommends both long-term (90-day) and short-term (two-day) testing of structures to determine levels of radon gas. If hazardous levels of radon are found, measures will be taken to reduce risk.	OCTA/Consultant	Project proponent will test areas prone to radon gas prior to demolition or construction operations for the project.			
HAZ-(E)RB-10	Areas prone to methane gas will be tested prior to demolition or construction operations for the project. If hazardous levels of methane are found, measures will be taken to reduce risk.	OCTA/Consultant	Project proponent will test areas prone to methane gas prior to demolition or construction operations for the project.			
HAZ-(E)RB-11	Materials used in construction and maintenance of the project will be evaluated prior to use for their level of hazard. Manufacturer's directions and warnings will be followed during use. In addition, recommended appropriate safety equipment will be used for all material.	OCTA/Consultant	Project proponent will evaluate materials used in construction and maintenance of the project prior to use for their level of hazard. Manufacturer's directions and warnings will be followed during use.			
	VISUAL RESOURCES	x				
VIS-(E)RB-1	At locations where residential structures are removed and neighboring residences and/or parks are exposed to new views of the freeways or freeway structures or intactness of the neighborhood is affected, additional landscaping will be provided within the right-of-way or in remnant parcels remaining after acquisition of the homes, if available. This landscaping could be designed to provide a transition between the residential level of landscaping of the surrounding properties and the freeway and to create a buffer between the freeway and the residences, but not necessarily to completely screen the freeway from view. All features of the residential community that can be retained, especially sidewalks and street trees, will be retained.	OCTA/Consultant	Where there is sufficient setback for replanting, the project proponent will provide landscaping within the right-of-way or in remnant parcels remaining after acquisition of the homes, at locations where residential structures are removed and neighboring residences and/or parks are exposed to new views of the freeways or freeway structures or intactness of the neighborhood is affected. Any portion of bridges, such as over the Santa Ana River and Santiago Creek, that may offer shelter from the elements should be enclosed by use of temporary barricades, such as chain-link fencing.			
VIS-(E)RB-2	As much as possible, existing landscaping within the state right-of-way will be preserved. Areas needed for construction will be minimized where feasible, while maintaining safety for construction workers and the public.	OCTA/Consultant	Project proponent will preserve the maximum existing landscaping within the State right-of-way as much as possible.			
VIS-(E)RB-3	Where freeway landscaping is removed due to the widening of the freeway or the realignment of ramps, and where enough right-of-way is available, replacement landscaping will be provided at a one-to-one ratio. If necessary, available areas outside the state right-of-way could be used for replacement landscaping, if long-term maintenance by the local community can be assured. Replacement planting shall be provided with sufficient irrigation and maintenance to ensure survival.	OCTA/Consultant	Where there is sufficient setback for replanting, the project proponent will provide replacement landscaping at a one-to-one ratio.			
VIS-(E)RB-4	Noise barriers and other large structures shall be visually softened through the use of vines, at a minimum, with shrubs and trees used where sufficient right-of-way exists. This planting will be used to reduce the visual impact for both the viewers on the outside of the noise barriers (adjacent land uses) and for viewers on the freeways/arterials. Where there is no room for landscaping because the barrier is placed at the edge of shoulder but there is available land on the outside of the barrier, vines will be planted behind the barrier and trained to spill over the top of the barrier. Enhanced noise barrier design, such as bas-relief designs, could be used, similar to those existing along SR-22 and SR-55 in the project study area. Graffiti-resistant surfaces shall be used.	OCTA/Consultant	Where sufficient right-of-way exists, the project proponent will plant shrubs and trees to softened noise barriers and other large structures. If right-of-way is insufficient, vines shall be used to soften surfaces of walls. Where planting is not suitable, such as under overpasses, the project proponent will construct these spaces as pleasant urban space, possibly hardscaped with river rock, architectural bas-relief, or public art.			
VIS-(E)RB-5	California native wildflowers will be included at a minimum level of 0.25 percent of total planting and irrigation budget.	OCTA/Consultant	The project proponent will include California native wildflowers at a minimum level of 0.25 percent of total planting and irrigation budget.			
VIS-(E)RB-6	For any new or widened crossings of the Santa Ana River trail, grade separations shall be provided in order to maintain the trail's continuity.	OCTA/Consultant	The project proponent will coordinate with the City of Santa Ana in order to maintain continuity at the Santa Ana River trail by providing grade separation.			

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VIS-(E)RB-7	The project designers shall work with the Department and the local governments to provide freeway landscaping consistent with local policies, and to integrate the facility with adjacent communities. Entrances to cities within the study area may be enhanced. Cooperative agreements shall be executed for any funding, installation and maintenance of this landscaping.	OCTA/Consultant	The project proponent will coordinate with the California Department of Transportation and the local governments to provide freeway landscaping consistent with local policies, and to integrate the facility with adjacent communities. If necessary, cooperative agreements shall be executed for any funding, installation and maintenance of landscaping. For the City of Orange, the structure at Grand Ave/Glassel Street will be designed to maintain the historic character of the creek and bordering structures/amenities.			
VIS-(E)RB-8	Where possible, views of the freeway and associated elements, including noise barriers, shall be buffered from homes, schools, parks and similar uses by planting.	OCTA/Consultant	Where possible, the project proponent will review and ensure views of the freeway and associated elements, including noise barriers, shall be buffered from homes, schools, parks and similar uses by planting. This will be performed in accordance with the Department's planting policies, consistent with its' approved plant lists.			
VIS-(E)RB-9	Where possible, objects viewable from the freeway, such as of open storage for industrial uses, shall be screened from view by use of highway planting. Replacement planting outside the right-of-way could be used for this purpose if maintenance by local communities or landowners can be assured.	OCTA/Consultant	Where possible, the project proponent will screen objects such as open storage for industrial uses from freeway viewers by use of highway planting.			
VIS-(E)RB-10	Highway planting shall be appropriately scaled and oriented to the freeway viewer.	OCTA/Consultant	Where possible, the project proponent will scale, maintain, and orient highway planting appropriately to the freeway viewer. This task will be performed in accordance with Department's highway planting policies.			
VIS-(E)RB-11	Highway planting should be selected based on maximum benefit for the long-term costs involved. Plant materials that can withstand the difficult roadside conditions and survive with limited irrigation and minimal maintenance should be used. Use of native California plants is encouraged; invasive species shall be avoided. Other considerations recommended in the Highway Design Manual will be incorporated into designs, including avoidance of brittle trees, monocultures, edible plants and poisonous plants.	OCTA/Consultant	Where possible, the project proponent will review and select highway planting based on the maximum benefit for the long-term costs involved. This task will be performed in accordance to the Department's highway planting,policies and the Highway Design Manual.			
VIS-(E)RB-12	Highway planting near the I-405/I-605 interchange will be chosen to reduce the visibility of the existing structures through the use of tall, fast growing trees or shrubs. Where possible, trees will be provided near the existing soundwall to create a buffer between the highway and the residential community. The intent of this type of mitigation is to screen the existing two structures with plant material, thereby creating only one visible overhead structure.	OCTA/Consultant	Where possible, the project proponent will reduce visibility of the existing structures by implementation of highway planting near the I-405/605 interchange.			
	ENERGY	x				
	N/A					
	CONSTRUCTION-RELATED IMPACTS	x				
CON-(E)RB-1	If shallow groundwater lenses are encountered during construction, appropriate dewatering measures will be used to prevent impacts on construction activities and to ensure that polluted runoff does not leave the site. Disposal of the excess water shall comply with the applicable NPDES permit and the Department's water quality standards.	OCTA/Consultant	The project proponent will provide proper dewatering measures if shallow groundwater lenses are encountered during construction.			
CON-(E)RB-2	If temporary construction easements result in an inability for landowners to use their property as intended, additional substantial impacts not foreseen in this document could occur. Following construction, affected properties will be returned to their pre-construction condition.	OCTA/Consultant	The project proponent will provide proper documentation, including Supplemental environmental analysis, should temporary construction easements result in the property owner inability to use their property as intended.			
CON-(E)RB-3	Where appropriate and feasible, construction staging areas will be located inconspicuously to minimize adverse visual effects upon residential and recreational areas.	OCTA/Consultant	Where appropriate and feasible, the project proponent will locate construction staging areas inconspicuously to minimize adverse visual effects upon residential and recreational areas. This task will be implemented in accordance to local ordinances and the Department's construction staging policies.			
CON-(E)RB-4	During final design the project proponent, with the concurrence of the Department, will work closely with the affected local agencies to coordinate traffic control plans, construction schedules and necessary detours for both motorized and non-motorized vehicles. The project proponent, with the concurrence of the Department, will establish a Traffic Management Plan (TMP) consistent with the Department's standard procedures to minimize localized congestion and travel delays during construction. Development and implementation of this plan shall be coordinated with local agencies and transit districts. The TMP will include provisions for public notification through various forms of media. Construction will begin after right-of-way acquisitions and final designs are complete.	OCTA/Consultant	The project proponent will communicate with the Department and the local agencies to coordinate traffic control plans, construction schedules, and necessary detours for both motorized and non-motorized vehicles. The project proponent and the Department will establish a Traffic Management Plan (TMP) consistent with the Department standard procedures to minimize localized congestion and travel delays during construction.			
CON-(E)RB-5	Prior to beginning construction the project proponent, with the concurrence of the Department, will submit a copy of the proposed construction schedule and detour information to all potentially affected school districts and associated transportation departments so that school bus routes and emergency vehicle routes can be revised.	OCTA/Consultant	The project proponent will coordinate, prior to commencement of construction, with affected entities and submit a copy of the proposed construction schedule and detour information to all potentially affected school districts and associated transportation departments so that school bus routes and emergency vehicle routes can be revised. Also, if there are any changes to the construction schedule, the project proponent is required to resubmit the revised schedules.			
CON-(E)RB-6	The project proponent will require all construction contractors to integrate recycling or material reuse programs into their bid proposals.	OCTA/Consultant	The project proponent will integrate recycling or material reuse programs into their bid proposals for all construction contractors.			
CON-(E)RB-7	Construction techniques will be used to ensure the safety of construction workers and the general public in the event of an earthquake. Such techniques will include the use of shoring and falsework to support structures under construction and limiting access to dangerous areas, such as the foot of newly constructed slopes, areas around equipment, and materials storage areas.	OCTA/Consultant	The project proponent will take proper measures in the event of an earthquake to provide maximum safety to the construction workers and the general public.			